FEASIBILITY STUDY

Conover, Eastern Loop From NC 10
to NC 16, Catawba County,
U-2404

Prepared by
Planning and Research Branch
Division of Highways
N. C. Department of Transportation

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I. DESCRIPTION

This report covers a preliminary study of an Eastern Loop in the Conover-Newton area of Catawba County. This project is included in the 1988-1996 Transportation Improvement Program (TIP) for feasibility study and/or right-of-way protection. It is not currently funded.

II. PURPOSE OF PROJECT

Studied Route

The location of the project, mainly on new location, is shown on Figure 1. Total project length is approximately 9.1 miles. The proposed alignment utilizes approximately 2.0 miles of existing roads: SR 2642 (Thornburg Drive); SR 1800 (Caleb-Setzer Road); and SR 1927 (East P Street).

SR 2642 encompassed by this project runs for approximately 0.7 mile between Keisler Road (SR 2668) and US 64-70. This is a two-lane, 24-foot wide facility on 60-foot right-of-way.

Caleb-Setzer Road (SR 1800) is approximately 0.9-mile in length between NC 10 and NC 16 (each southeast of Newton). This facility is a 2-lane roadway with 18-foot pavement on a maintained 35-foot right of way.

East P Street (SR 1927) is a 2-lane, 22-foot facility south of Newton. It presently serves as industrial access to US 321. Approximately 0.4 mile of this facility would be utilized by the proposed project.

Need for Project

Justification for an Eastern Loop around the Conover-Newton area stems from a need to provide (a) better traffic service for vehicles making through movements on NC 10 and NC 16 and (b) relief to the heavily used existing routes. Major industrial development occurring east of Newton will place heavier demands on the through-town routes if the project is not implemented. The route is a vital link in the Hickory-Newton-Conover Urban Area Thoroughfare Plan (adopted 1986) where it appears as a proposed major thorougfare.

Local support for the project is strong. The Cities of Newton and Conover have surveyed and drawn engineering plans for most of the studied project. Two sections of 80-foot right-of-way south of Newton (800-feet and 2000 -feet in length) have been acquired, with the 2000-foot section having been graded with utilities in place. Another 3000-foot section of right-of-way in the Newton area is currently being negotiated. The

0.2-mile portion of Thornburg Drive from SR 1739 to US 64/70 was recently completed by the developer in cooperation with the City of Conover. Surveying and planning for an extension of Thornburg Drive northward to SR 1709 has also recently been completed.

III. RECOMMENDATIONS AND COSTS

The adopted Hickory-Newton-Conover Urban Area Thoroughfare Plan shows a proposed alignment for the studied segment of the outer loop of the Conover-Newton area (see Figure 2). The recommended route closely follows this thoroughfare plan alignment (see Figure 1). An aerial mosaic showing the recommended alignment is on file in the Planning and Research Branch.

The project is divided into 3 segments (see Figure 1) in the recommended order of priorities to permit staged construction if desired. Segment A (first priority) runs between NC 10 west of Newton and NC 10 east of Newton for approximately 4.3 miles. Segment B (second priority) extends for 3.0 miles between NC 10 and US 64-70 east of Newton and Conover. Segment C (third priority) extends the loop 1.8 miles from US 64-70 across I-40 to NC 16 north of Conover.

As shown on Figure 1, initial traffic volumes that would use the subject loop are estimated to range from 3000 to 8,000 vehicles per day (vpd). Traffic volumes in the year 2010 are expected to range from 4600 vpd to 13,500 vpd.

The recommended cross section for entire project is a 2-lane, 24-foot paved section with 12-foot shoulders (2 feet of which are paved). A grade separation is required on Segment C where it crosses existing I-40. The estimated right-of-way width used for cost purposes is 100 feet, which will allow for future upgrading to an ultimate 5-lane curb and gutter section if required.

The estimated costs for the recommended improvements are as follows:

	Construction Cost	Right-of-way Cost	Total Segment Cost
Segment A (4.3 miles)	$5,200,000	$830,000	$6,030,000
Segment B (3.0 miles)	3,900,000	1,470,000	5,370,000
Segment B (1.8 miles)	3,900,000	340,000	4,240,000

Thus, the total cost of the proposed facility is $15,640,000, with $13,000,000 for construction and $2,640,000 for right-of-way. The above cost estimates were prepared by the Preliminary Estimate Engineer and the Right of Way Branch.

IV. OTHER COMMENTS

No sensitive areas of environmental concern are anticipated to be crossed by the proposed loop. Possible negative impacts include loss of forested land and wildlife habitat and displacement of 8 residences.

If the project is to be implemented at a future date, all feasible alternatives and their associated impacts will have to be evaluated in a detailed planning/environmental document prior to that time, and a final decision made as to the most appropriate location and improvement.

MH/sdt

BEGIN PROJECT

SEGMENT A
NEWTON
POP. 7,624

SEGMENT B

CONOVER
POP. 4,245

SEGMENT C

END PROJECT

EAST P ST. (SR 1927)

CALEB-SETZER RD. (SR 1800)

THORNBURG DR. (SR 2642)

Newton-Conover Airport

3500 / 6000

4400 / 7200

3000 / 4600

3000 / 4800

5000 / 8200

5000 / 8400

8200 / 13500

0000 / 0000 = INITIAL TRAFFIC / 2010 TRAFFIC

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
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CONOVER, EASTERN LOOP
FROM NC 10 TO NC 16
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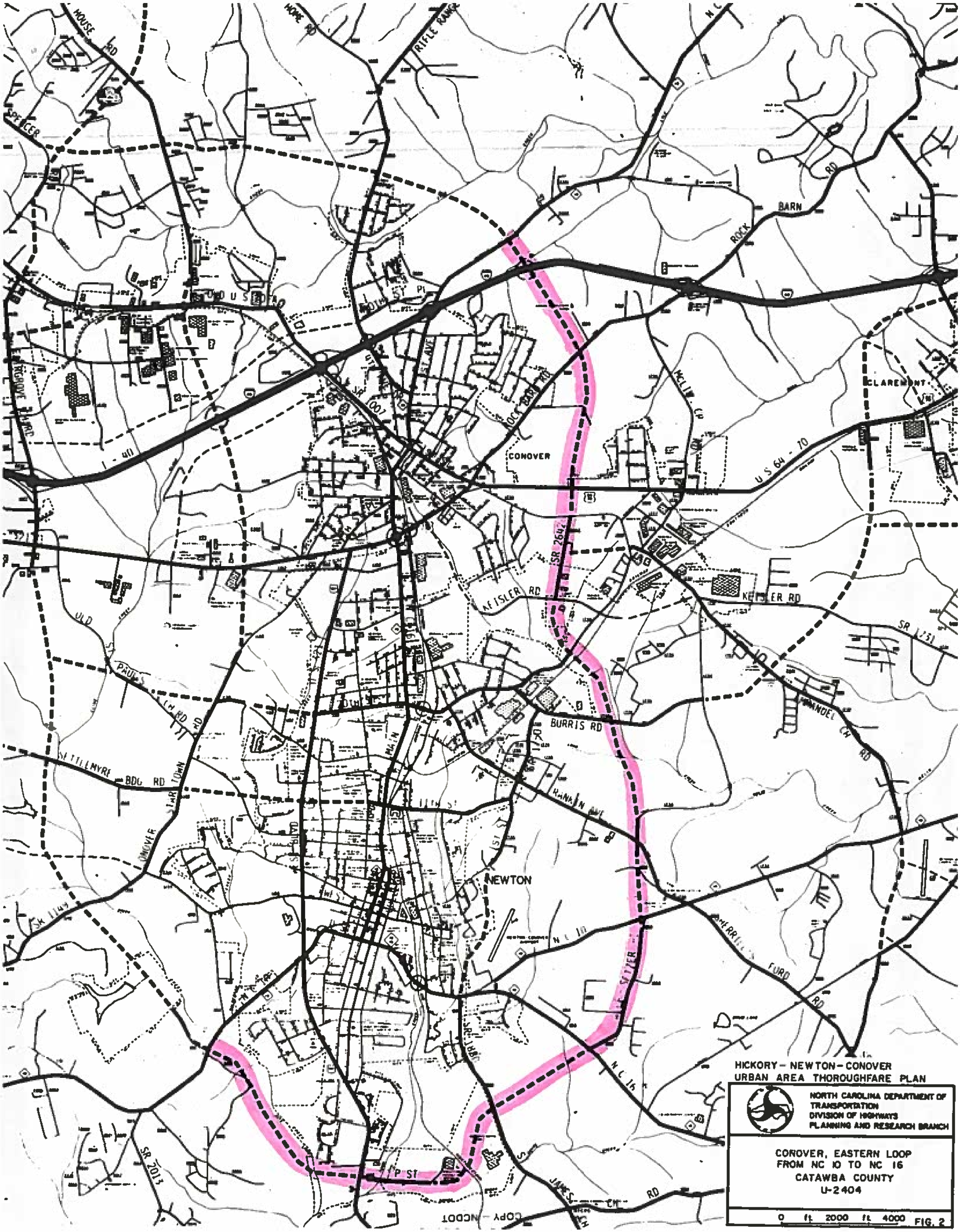
0 mile 1/2 FIG. 1



HICKORY-NEWTON-CONOVER URBAN AREA THOROUGHFARE PLAN

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0 ft 2000 ft 4000

FIG. 2